



282639

Illinois Environmental Protection Agency

Date: October 19, 1993
To: Division of Land Pollution Control, Division File
From: Rich Johnson^{RJ}, DLPC/FOS, Springfield Region
Subject: LPC1358070001--Montgomery County
Hillsboro/Eagle Zinc
ILD980606941
FOS

I conducted an inspection of the Eagle Zinc plant located in Hillsboro, Illinois. An initial inspection conducted on July 15, 1993. Accompanying me on the initial inspection were Mr. Jon Wells, Division of Water Pollution Control/Field Operation Section (Springfield Region), and Mr. Weldon Kunzeman, Environmental Health Practitioner with Montgomery County Health Department. During the follow-up inspection Mr. Kunzeman again accompanied me to the facility. Met and interviewed both times were Mr. Tom Youngless, Plant Manager. On the October 1, 1993, inspection three employees from the Division of Land Pollution Control/Remedial Project Management Section (RPMS) were met at Eagle Zinc. The DLPC personnel included: Mr. Brad Taylor with the RPMS/Pre-Remedial Site Investigation Unit (PRSIU); Sheri Adams of RPMS/PrSIU and Greg Spenser of RPMS/PRSIU.

My inspection was conducted to observe the on-site disposal practices of Eagle Zinc. During the July 15, 1993, inspection I collected 3 water samples at the facility.

An "On-site Industrial Waste Handling Report Form" had been sent to the Agency in 1988. The dated on the report was December 15, 1988. Section 21(d)(3) of the Illinois Environmental Protection Act (the Act) in part indicates no person shall conduct any on-site landfill or waste pile operation after August 31, 1988, and which does not have an Agency permit, without giving notice of the operation to the Agency by January 1, 1989. On Eagle Zinc's form it notified the Agency that the site handled carbonaceous iron slag i piles. The annual amount was described as 2500 tons and the capacity was for another 10 years.

Mr. Taylor indicated that he and the other RPMS personnel were on-site to see the operations at Eagle Zinc and to locate potential areas for later sampling purposes. The Facility had already been inspected February 10, 1986, by Ecology and Environmental, Inc. (contracted by the United States Environmental Protection Agency) to determine the site's hazardous ranking for possible inclusion on the National Priorities List. Mr. Taylor indicated that PRSIU wanted to do further investigation of Eagle Zinc to determine whether the previous hazardous ranking was accurate or not.

Background Information

Eagle Zinc produces zinc oxide. Zinc oxide is use in paints, glaze in ceramic, adhesive, vulcanization process in

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making rubber tires, etc. The plant was operated by Eagle Picher from the 1920's until 1980. Sherwin Williams was said to have operated the site from 1980 until 1984. Since 1984, the plant has been operated by Eagle Zinc. Eagle Zinc was said to be a division of T.L. Diamond (address #30 Rockefeller Plaza, New York City). The plant property encompasses about 132 acres.

DLPC originally inspected the facility in the 1970's when it was called Eagle Picher. In the 5-15-73, inspection report it was indicated that waste disposed on-site included scrap metal, furnace residue and storage of zinc bearing material (graded by percentage of zinc). The main focus of the early DLPC inspections was to have exposed metal scrap waste and other wastes covered. There was no indication that the large piles of on-site generated waste such as furnace residue and zinc bearing material were considered as being out of compliance.

On July 1, 1981, several samples were taken at the facility by the DLPC's Special Project's Unit. At the time the samples were collected, the facility was owned and operated by Sherwin-Williams. Based on the surface water analytical results, the Agency's Division of Water Pollution Control began to investigate the facility. DWPC personnel investigated the facility several times in 1981 and took surface water samples on November 19, 1981 and March 23, 1982. DWPC's investigation found elevated constituents in the water samples. To improve the quality of the surface water run-off, Sherwin Williams removed about 36 million pounds of various residues from about 10 acres of the plant property. This was said to include 26,500,000 lbs. of muffle dross, 8,200,000 lbs. of oversize material and 1,200,000 lbs. of mixed furnace charge. These different residues were reportedly sent to another facility that was able to reclaim the zinc in the materials in processes more efficient than those available at Eagle Zinc. This facility was said to be St. Joe Minerals, Manacoa, Pennsylvania.

Sherman-Williams had submitted a Notification of Hazardous Waste Site under 103(c) of CERCLA (Comprehensive Environmental Response, Compensation and Liability Act) dated June 2, 1981. The notification indicated that the facility had a landfill. Because of the notification, the Agency submitted a Potential Hazardous Waste Site Preliminary Assessment to the USEPA. The Notification of Hazardous Waste Site under 103(c) was one of the factors that led to a site investigation on February 10, 1986, by Ecology & Environment. Ecology & Environment's Facility Inspection Team found that the facility makes zinc oxide by pyrometallurgical process. Impure zinc oxide is fed into a rotary furnace with coal and heated. At a certain heat the zinc sublimates (forms into a vapor) and is fed to and recovered in a baghouse. The residual material, which consists of zinc silicates, zinc ferrites and iron silicates, is removed from the furnace and disposed of in piles on company property.

Personnel from the Agency's Division of Air Pollution Control have also been out to the facility to inspect the site.

Plant Processes

There are currently about 34 employees at the plant. There are 28 hourly workers and 5 salaried workers. The plant is open 7 days a week. Mr. Youngless said that the plant produces zinc oxide using the American process. To make zinc oxide they use a pyrometallurgical process with anthracite coal as a reducing agent. A mixture of zinc feedstock and coal is heated in a rotary furnace in which the zinc is reduced to zinc vapor and oxygen. Ambient air is introduced with the zinc vapor to make zinc oxide. The zinc oxide is cooled through a series of cooling pipes. It then is caught in a baghouse. A shaker is used to consolidate the zinc oxide which looks like white powder (such as flour). The zinc oxide can be further treated by having it re-heated in one of two rotary furnaces. This additional heating is done to impart an additional type of characteristic to the product. Some of the zinc feedstock comes to the plant by railcar and some by truck. All of the coal comes to the plant by railcar. It should be noted that there is a railpad spur along the east side of the facility.

Mr. Youngless was asked what the zinc feedstock was composed of and who supplied it. He declined to identify the source of the zinc but did say that they received some of the material from an Eagle Zinc plant located in West Virginia. Mr. Youngless said that the zinc material used at the facility was not zinc ore but was a crude or low quality zinc product from other plants. The plant has to process Eagle Zinc's bi-product before using it. According to Mr. Youngless, the chlorides from the zinc bi-product has to be driven off in another of the plant's rotary furnaces (in Block 3) prior to its being used as on-site feedstock. He indicated the zinc chlorides are collected and sent back to the sister plant.

Coal is unloaded along the railroad spur in the eastcentral region. Zinc feedstock is placed in either outside or inside bins south of Block 3. The coal and the zinc feedstock are scooped up by an end-loader and transported by dump trucks to the Block 2 rotary furnace. Some of the zinc feedstock has to be ground up in a grinder to make it smaller. It was observed that the feedstock piles were different colors. Mr. Youngless attributed the color variation to whether they contain iron, copper, higher quantity of zinc or had some other constituent in them (see photos 3 and 4 of Roll 451). Besides the piles of zinc feedstock there were a couple that appeared to be brick mixed with granular material. Mr. Youngless said that the piles were material cleaned out of one of the rotary furnaces and the brick was refractory brick that lined the furnace. He indicated that the brick would be pulled out

from the piles and then the granular material could be used as feedstock.

Mr. Youngless called the material that comes out of the furnaces as furnace residues. Furnace residues from Block 2 were black in appearance (see photos 1 and 2 of Roll 451) with some of it granular and some as large as a baseballs. Mr. Youngless said the residue will eventually be processed to recover the carbon. Mr. Youngless indicated the plant has a Carbon Recovery Building to remove coal (which contains carbon) from the furnace residue. Coal was said to be separated from the heavier furnace residue by using screens of different sizes and water. The left over heavier material was called furnace tailings by Mr. Youngless. He said even the tailings had some worth because they contain a certain amount of zinc and copper. However, the tailings can not be re-used on-site. According to Mr. Youngless, it has been years since any tailings have been sold off-site. Mr. Youngless indicated that no recent effort to sell the tailings has been made because the price of zinc was so low on the metal markets. He attributed part of the recent low prices to the glut of metals coming into the market from the former Soviet Union. In a letter dated March 11, 1991, Mr. Youngless indicated that Eagle Zinc does not operate an on-site landfill. Mr. Youngless had said during the inspection that he did not view the furnace residues or tailings as waste since they can be reused or reclaimed.

The Carbon Recovery operation hasn't been operated for about 1.5 to 2 years, according to Mr. Youngless. A new building is to be built just north of the current one. The building's equipment had already been transferred to the area to the north. Apparently, the old building is in such disrepair that it was going to be torn down. A long building northeast of the Carbon Recovery area also looked like it was in need of repair. This building was called Block 3. There were several rotary furnaces located in Block 3 (one was said to heat the zinc feedstock from the sister plant).

Almost directly west of the old Carbon Recovery Bldg. was small pond (see photo 4 of Roll 451). The banks of the pond were some type of residue or tailing materials. Mr. Wells inquired whether the liquid in the pond would be able to discharge from the lower west end. Mr. Youngless said that the pond does not overflow or discharge. However, during the inspection a small flow of liquid was observed coming from the base of the pond's west bank. The pond appeared to be about 4 feet deep at the east end and became shallower toward the west end. It was about 40 feet long by 20 feet wide. Along the south side of the pond was a manhole with a cover. The pond was said to be part of the carbon recovery process. Water in the pond was said to recirculate back and forth from the pond to the carbon recovery site separating the coal from the other furnace residues. Mr. Youngless said the pond was designed with a clay liner so it would be able to hold water.

Eagle Zinc has an on-site laboratory for checking the zinc oxide and feedstock. The lab uses different types of acids and solvents (one of the solvents was said to be mineral spirits). Small amounts of lab reagents are said to be discharged down the drain. Mr. Youngless indicated that the plant is hooked to the Hillsboro sanitary sewer system.

During the October 1, 1993, inspection I went into the plant's maintenance shop and talked to Mr. Bob Dvorak. Mr. Dvorak indicated that he periodically changes motor oil for the on-site vehicles. The used motor oil is placed in empty 55-drum and held until a used oil transporter comes to the site to pick them up. There were 5 55-gallon drums that apparently held used oil setting in and around the south side of the maintenance shop at the time of the inspection. These included: 2 full drums; 2 drums 3/4 full and; 1 was 1/2 full. Mr. Dvorak said that about 1 55-gallon drum of used oil is generated every month or so. I asked Mr. Youngless who picked up the used oil. He wasn't sure but thought that either Custom Blend or McKay Auto collects their used oil. According to Mr. Youngless, the facility has a crane, pickup trucks, an end-loader and dump trucks that have to be serviced. No parts washer is operated at the maintenance shop. Mr. Dvorak said he occasionally cleans parts with diesel fuel or gasoline but there is no parts washer used and he does not generate any spent solvent that has to be managed.

Inspection Observations

North of the Carbon Recovery pond was an exposed fill face of fire brick, structural brick, concrete, metal containers, miscellaneous metal waste, etc. (see photos 10 and 11 of Roll 451 and photos 6, 7, 8 and 9 of Roll 454). Mr. Youngless indicated building debris was from a building torn down at the plant about a year ago and dumped in this location.

Empty 55-gallon drums were observed south of the Carbon Recovery Bldg., just northwest of the Carbon Recovery Bldg. and south of the northern storage building (see photos 8 and 9 of Roll 451 and photo 11 of Roll 454). Mr. Youngless said that some of the better drums can be used to hold material generated at the plant. However, there were a large number that had holes in them and appeared to have been on-site for a long time. I recommended that the drums that no longer had any reason for being on-site should be removed to a scrap-yard.

Numerous piles of granular materials were observed during the inspections. These piles are shown on the site sketch that accompanies this inspection report. The site sketch also designates what Mr. Youngless thinks the contents of the piles are.

Sampling

During the July 15, 1993, inspection 3 surface water samples were collected at Eagle Zinc. The first sample

(S301) was taken from water (see photo 18 of Roll 452) that exited a pond located in the southwest corner of the property (see photos 15 and 16 of Roll 452). Water discharges from a break in the west wall of the pond (see photo 17 from Roll 452) and flows to a tributary of Shoal Creek. The pond receives water from a low marshy area to the east. Mr. Wells walked upstream of the low area to try to find the source of the water. He indicated that the flow of water went around a concrete wall standing by itself northeast of the pond. The second sample of water (S101) was collected in the low marshy area northeast of the pond (see photo 19 of Roll 452). The last water sample (S302) was taken from a stream exiting the eastern boundary of Eagle Zinc (see photo 20 of Roll 452). The stream flows under a public road and continues eastward where it apparently empties to Hillsboro Lake.

Each sample was collected in a laboratory cleaned bottle. The bottles were all sealed with evidence tape and placed in a cooler with ice packs. Samples to be analyzed for organic constituents (totals and Toxic Characteristic Leaching Procedure), pH and flash point were transported to the Agency's Springfield lab on July 15, 1993. Samples to be analyzed by the Agency's Chicago lab for TCLP metals were also dropped off at the Springfield lab on July 15, 1993. Samples to be analyzed for total inorganic constituents were retained at the Springfield Regional Office until they were relinquished to UPS (United Parcel Service) on July 19, 1993. These samples went to the Agency's Champaign lab.

Water analytical results did not exhibit a hazardous waste characteristic. However, there were some inorganic constituents that were elevated above the State surface water standards.

Additional Information

1. Mr. Youngless said that Eagle Zinc did not have any on-site water wells. The City of Hillsboro was said to provide the facility with potable water.
2. Mr. Youngless said he has been plant manager for about 4 years (1989). The previous plant manager was said to be Mr. Art Martel.
3. Eagle Zinc has a process where zinc feedstock is added to the surface of asphalt shingles to prevent mildew. The process is called Zebra Operation.
4. During the October 1, 1993, inspection an underground concrete chamber was found that was partially filled with water (see photo 4 of Roll 454). West of the chamber was a concrete culvert where water was flowing out of (see photo 3 of Roll 454). Mr. Kunzeman said he followed the water flow until it ponded and went no further.
5. Leaded zinc oxide was reported produced at the facility prior to 1958. The plant ceased this operation over 30 years

ago. What was done with the residues and tailings of this material is not known.

6. Eagle Zinc has an Air Pollution Control permit (ID. No. 135807AAB) for 2 rotary furnaces with baghouses, 1 waezling furnace, 1 rotary dryer, 1 muffle furnace door hood and 2 propane storage tanks. The expiration date for the permit is 5-8-97.

7. Mr. Youngless said the facility had capacity for storing 500 or so tons of raw materials. He indicated they have the storage capacity for about 100 tons of finished product (zinc oxide).

8. Mr. Youngless said the facility generates about 5 tons of furnace residue each day. He believes that about 50% of the 5 tons can be processed to remove the carbon. This would leave about 2.5 tons of the tailings after the carbon recovery process. It should be noted that the definition of waste pile in Part 810 of 35 Ill. Adm. Code is an area of non-containerized masses of solid, non-flowing wastes placed on the ground for disposal. A waste pile is a landfill unless the operator can demonstrate that wastes are not accumulated over time for disposal. The definition of a landfill under Part 810 is waste placed and accumulated over time for disposal that does not include land application surface impoundments or underground injection wells. However, the definition does include waste piles. The definition of disposal includes discharge, deposit, spilling, leaking, dumping or placing of any solid waste into or on any land or water or into any well such that the waste or any constituent of the solid waste may enter the environment. If the solid waste is accumulated and not confined or contained to prevent its entry into the environment, or there is no certain plan for its disposal elsewhere, such accumulation shall constitute disposal.

Apparent Violations.

1. 722.111 of 35 Illinois Administrative Code. Each generator of a solid waste is to determine whether the waste they generate is hazardous or not. This had not be done for the used oil that is accumulated and then transported off-site. There are also several piles of furnace residues and tailings that have not been determined whether they are hazardous or not.

2. Section 808.121(a) of 35 Ill. Adm. Code. Each person who generates waste shall determine whether the waste is a special waste. This has not been done with the used oil or the on-site generated furnace residues and tailings.

3. Section 808.121(b) of 35 Ill. Adm. Code. No person shall deliver special waste to a hauler unless the waste is accompanied by a manifest as specified in Section 808.122,

and the hauler has a special waste hauling permit issued pursuant to 35 Ill. Adm. Code 809. Used oil had been given to a hauler and no manifest has been prepared or accompanied the shipment.

4. Section 808.122 of 35 Ill. Adm. Code. Except as otherwise provided by 808.121(b), a generator of any special waste shall prepare a manifest, as prescribed by 35 Ill. Adm. Code 809.501, prior to shipment. No manifests have been prepared and none accompanied the used oil as it was transported off-site.

5. Section 809.301 of 35 Ill. Adm. Code. No person shall deliver any special waste generated within Illinois or for disposal, storage or treatment within Illinois unless that person concurrently delivers a manifest completed in accordance with Subpart E of Part 809. No manifests have been prepared and none accompanied the used oil as it was transported off-site.

6. Section 809.501 of 35 Ill. Adm. Code. Any person who delivers special waste to a permitted special waste hauler shall complete a manifest to accompany the special waste from delivery to the destination of the special waste. No manifests have been prepared and none accompanied the used oil as it was transported off-site.

7. Section 814.103 of 35 Ill. Adm. Code. No later than 6 months after the effective date of Part 814 (September 18, 1990), all operators shall send notification to the Agency describing the facility, estimated date for closure of existing units, and whether the facility is subject to the requirements of Subpart B, Subpart C, Subpart D, or Subpart E of Part 814. Eagle Zinc has not notified the Agency of the above. The notification was due on March 18, 1991.

8. Section 815.201 of 35 Ill. Adm. Code. All landfills under Part 815 (on-site landfills) shall file an initial facility report with the Agency to provide information on location and disposal practices of the facility. An initial facility report as required in Part 815 had not been filed at the Agency. It should be noted that a blank report form was left with Mr. Youngless. The information to be filed is included in 815.203(b). The filing date was September 18, 1992, per 815.202.

9. Section 815.301 of 35 Ill. Adm. Code. All landfills regulated under Part 815 shall file an annual report with the Agency. The first annual report shall be filed on the first of January that follows the year in which the initial report is filed. Annual reports as required in Part 815 have not been filed at the Agency. It should be noted that a blank report form was left with Mr. Youngless.

10. Section 12(a) of the Illinois Environmental Protection Act (the Act). No person shall cause or threaten or allow the discharge of any contaminants into the environment so as to cause or tend to cause water pollution. Analyses indicated elevated levels of inorganic constituents in the samples collected.

11. Section 12(d) of the Act. No person shall deposit any contaminants upon the land in such place and manner so as to create a water pollution hazard. As indicated in the above paragraph the water sample analyses indicate levels of inorganic constituents above the state standards.

12. Section 12(f) of the Act. No person shall cause, threaten or allow the discharge of any contaminant into the waters of the State, including but not limited to, waters to any sewage works, or into any well or from any point source within the State, without a NPDES permit for point source discharges issued by the Agency. Eagle Zinc was found to be discharging contaminants to waters of the State without having a NPDES permit.

13. Section 21(a) of the Act. No person shall cause or allow the open dumping of any waste. It was noted that Eagle Zinc had indicated in their notification of On-Site Industrial Waste Handling Report that they had a landfill for carbonaceous iron slag. However, it is apparent that furnace refractory bricks, building demolition debris, empty drums and scrap metal, etc. are also being disposed on-site.

14. Section 21(d)(2) and (d)(3) of the Act. No person shall conduct any waste-storage, waste-treatment, or waste-disposal operation in violation of any regulations or standards adopted by the Ill. Pollution Control Board or the Act according to Section 21(d)(2). Section 21(d)(3), in part, requires an on-site landfill, waste pile, etc. to notify the Agency every 3 years of the activity being done at the site. This had not been done since the initial report in 1989.

15. Section 21(e) of the Act. This in part indicates that no person shall dispose, treat, or store except at a site which meets the requirements of the Act and of regulations and standards. The facility was found to be in apparent violations of several regulations and statutes.

cc: DLPC/FOS, Springfield Region
Montgomery County Health Department, Weldon Kunzeman
DWPC/FOS, Springfield Region-John Wells
DRM/RPMS, Tom Crause

Montgomery County

L2C

135 807 0001

DATE: 10-1-93

Hillsboro

Eagle Zinc

TIME: 8:51 AM - 1:36 PM

NOT DRAWN TO SCALE
● INDICATES LOCATION
WHERE PHOTOS WERE
TAKEN
MEASUREMENTS

APPROXIMATE

- (A) - OLD RESIDUE +/OR TAILINGS - N 647 by 158 FT
- (B) - OLD RESIDUE +/OR TAILINGS - N 370 by 105 FT
- (C) - CURRENT FURNACE RESIDUES - N 497 by 149 FT + 6 to 20 FT HIGH
- (D) - OLD RESIDUE +/OR TAILINGS - N 383 by 297 FT + 15 to 20 FT HIGH
- (E) - OLD RESIDUE +/OR TAILINGS - N 151 by 116 FT + 5 to 20 FT HIGH

- (F) - BLOCK 3 FURNACE RESIDUE -

N 194 by 122 FT

- (G) - OLD RESIDUE + TAILINGS - (S-W)

N 203 by 154 FT

- (H) - OLD RESIDUE + TAILINGS - (S-W)

N 81 by 43 FT

- (I) - OLD IRON & ZN SILICATE FROM SHERWIN-WILLIAMS (S-W)

N 200 by 97 FT

- (J) - OLD RESIDUE + TAILINGS -

N 942 by 284 FT

DEMOLITION WASTE

OLD CARBON RECOVERY BLD

AREA CLEANED UP BY SHERWIN-WILLIAMS STILL HAS RESIDUE +/OR TAILINGS ON THE GROUND + IN PILES

BAG HOUSE / SHAKERS

COOLING TUBES

REFINERY

SHIPPING DOCK

MIX ROOM

MIX PAD

PROPAANE TANKS

OFFICE

ENGINEER CHANGE HOUSE

MAINTENANCE SHED

ELECTRICIAN'S SHED

WOOD SHOP

* PILES MAY HAVE BEEN PLACED IN AREA PRIOR TO CARBON RECOVERY



INSPECTION PHOTOS

DATE: <u>10 / 1 / 93</u>	SITE #: <u>1358070001</u> CO.: <u>Montgomery</u>
TIME: <u>8:51AM - 1:36PM</u>	SITE NAME: <u>Hillsboro / Eagle Zinc</u>
PHOTOGRAPH TAKEN BY: <u>Rich Johnson</u>	
COMMENTS: Pictures taken toward: <u>west / the Southwest</u>	
<u>from the South-</u>	
<u>west region of the</u>	
<u>site</u>	
ROLL #: <u>454</u> Neg. #: <u>1</u>	

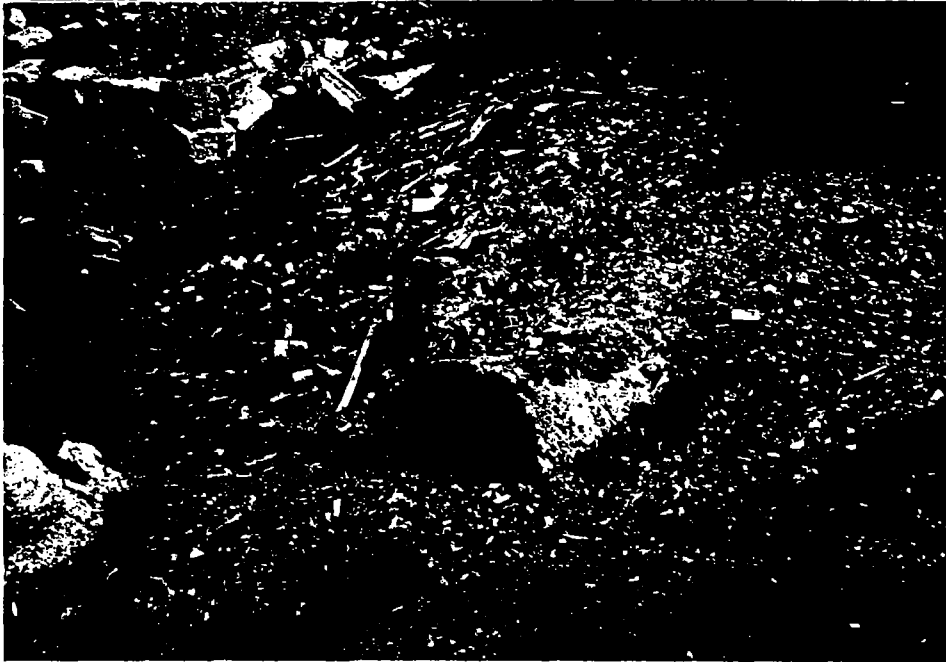
DATE: <u>10 / 1 / 93</u>
TIME: <u>8:51AM - 1:36PM</u>
PHOTOGRAPH TAKEN BY: <u>Rich Johnson</u>
COMMENTS: Pictures taken toward: <u>the Southwest</u>
<u>from the South</u>
<u>central region</u>
<u>of the site</u>
ROLL #: <u>454</u> Neg. #: <u>2</u>



FOS



INSPECTION PHOTOS

DATE: <u>10 / 1 / 93</u>	SITE #: <u>1358070001</u> CO.: <u>Montgomery</u>
TIME: <u>8:51AM - 1:36PM</u>	SITE NAME: <u>Hillsboro / Eagle Zinc</u>
PHOTOGRAPH TAKEN BY: <u>Rich Johnson</u>	
COMMENTS: Pictures taken toward: <u>the northeast</u>	
<u>from the south-</u>	
<u>central region of</u>	
<u>the site</u>	
ROLL #: <u>454</u> Neg. #: <u>3</u>	


DATE: <u>10 / 1 / 93</u>
TIME: <u>8:51AM - 1:36PM</u>
PHOTOGRAPH TAKEN BY: <u>Rich Johnson</u>
COMMENTS: Pictures taken toward: <u>the north from</u>
<u>the southcentral</u>
<u>region of the</u>
<u>site</u>
ROLL #: <u>454</u> Neg. #: <u>4</u>



FOS



INSPECTION PHOTOS

DATE: <u>10 / 1 / 93</u>	SITE #: <u>1358070001</u> CO.: <u>Montgomery</u>
TIME: <u>8:51AM - 1:36PM</u>	SITE NAME: <u>Hillsboro / Eagle Zinc</u>
PHOTOGRAPH TAKEN BY: <u>Rich Johnson</u>	
COMMENTS: Pictures taken toward: <u>the west /</u>	
<u>Southwest From</u>	
<u>area south of</u>	
<u>old Carbon Recovery</u>	
<u>Bldg.</u>	
ROLL #: <u>454</u> Neg. #: <u>5</u>	

DATE: <u>10 / 1 / 93</u>
TIME: <u>8:51AM - 1:36PM</u>
PHOTOGRAPH TAKEN BY: <u>Rich Johnson</u>
COMMENTS: Pictures taken toward: <u>the southwest</u>
<u>from an area</u>
<u>northwest of the</u>
<u>old Carbon Recovery</u>
<u>Bldg.</u>
ROLL #: <u>454</u> Neg. #: <u>10</u>



FOS



INSPECTION PHOTOS

DATE: <u>10 / 1 / 93</u>	SITE #: <u>1358070001</u> CO.: <u>Montgomery</u>
TIME: <u>8:51AM - 1:36PM</u>	SITE NAME: <u>Hillsboro / Eagle Zinc</u>
PHOTOGRAPH TAKEN BY: <u>Rich Johnson</u>	
COMMENTS: Pictures taken toward: <u>the north</u> <u>From an area north-</u> <u>west of old Carbon</u> <u>Recovery Bldg.</u>	
ROLL #: <u>454</u> Neg. #: <u>6</u>	



DATE: <u>10 / 1 / 93</u>
TIME: <u>8:51AM - 1:36PM</u>
PHOTOGRAPH TAKEN BY: <u>Rich Johnson</u>
COMMENTS: Pictures taken toward: <u>the northwest</u> <u>From an area north-</u> <u>west of old Carbon</u> <u>Recovery Bldg.</u>
ROLL #: <u>454</u> Neg. #: <u>7</u>



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INSPECTION PHOTOS

DATE: <u>10 / 1 / 93</u>	SITE #: <u>1358070001</u> CO.: <u>Montgomery</u>
TIME: <u>8:51AM - 1:36PM</u>	SITE NAME: <u>Hillsboro / Eagle Zinc</u>
PHOTOGRAPH TAKEN BY: <u>Rich Johnson</u>	
COMMENTS: Pictures taken toward: <u>the west from</u> <u>an area northwest</u> <u>of the Old Carbon</u> <u>Recovery Bldg.</u>	
ROLL #: <u>454</u> Neg. #: <u>8</u>	

DATE: <u>10 / 1 / 93</u>
TIME: <u>8:51AM - 1:36PM</u>
PHOTOGRAPH TAKEN BY: <u>Rich Johnson</u>
COMMENTS: Pictures taken toward: <u>the southwest</u> <u>from an area</u> <u>northwest of the</u> <u>Old Carbon Recover</u> <u>Bldg.</u>
ROLL #: <u>454</u> Neg. #: <u>9</u>



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NOV 05 1993
IEPA-DLPC

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INSPECTION PHOTOS

DATE: <u>10 / 1 / 93</u>	SITE #: <u>1358070001</u> CO.: <u>Montgomery</u>
TIME: <u>8:51AM - 1:36PM</u>	SITE NAME: <u>Hillsboro / Eagle Zinc</u>
PHOTOGRAPH TAKEN BY: <u>Rich Johnson</u>	
COMMENTS: Pictures taken toward: <u>the west/south-</u> <u>west from the</u> <u>northcentral region</u> <u>of the site</u>	
ROLL #: <u>454</u> Neg. #: <u>11</u>	

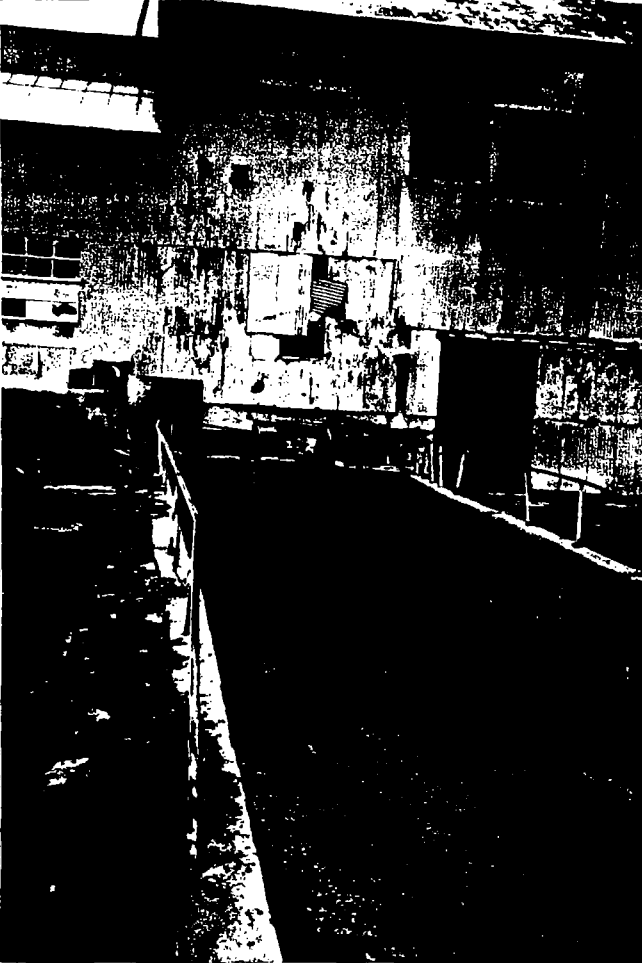
DATE: <u>10 / 1 / 93</u>
TIME: <u>8:51AM - 1:36PM</u>
PHOTOGRAPH TAKEN BY: <u>Rich Johnson</u>
COMMENTS: Pictures taken toward: <u>the west/north-</u> <u>west from the</u> <u>northcentral region</u> <u>of the site</u>
ROLL #: <u>454</u> Neg. #: <u>12</u>



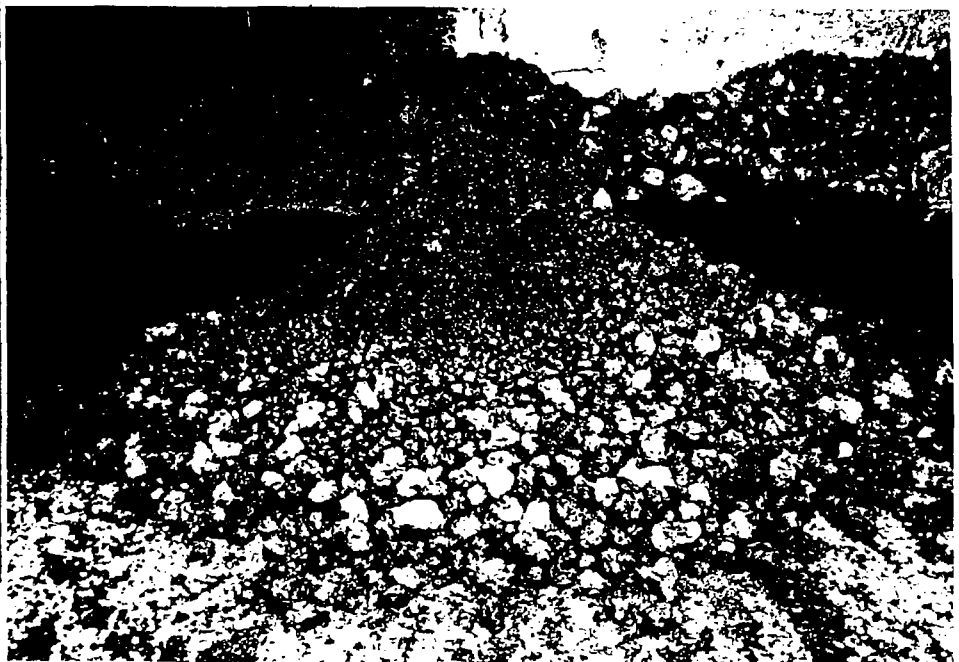
FOS



INSPECTION PHOTOS


DATE: <u>7/15/93</u>	SITE #: <u>1358070001</u> CO.: <u>Montgomery</u>
TIME: <u>10:15AM-5:09PM</u>	SITE NAME: <u>Hillsboro / Eagle Zinc</u>
PHOTOGRAPH TAKEN BY: <u>Rich Johnson</u>	
COMMENTS: Pictures taken toward: <u>the south</u>	
<u>from north side</u>	
<u>of "Block 2" furnace</u>	
<u>building.</u>	
ROLL #: <u>451</u> Neg. #: <u>1</u>	


DATE: <u>7/15/93</u>
TIME: <u>10:15AM-5:09PM</u>
PHOTOGRAPH TAKEN BY: <u>Rich Johnson</u>
COMMENTS: Pictures taken toward: <u>the south</u>
<u>from the north</u>
<u>of "Block 2" furnace</u>
<u>bdg.</u>
ROLL #: <u>451</u> Neg. #: <u>2</u>





INSPECTION PHOTOS


DATE: <u>7/15/93</u>	SITE #: <u>1358070001</u> CO.: <u>Montgomery</u>
TIME: <u>10:15AM-5:09PM</u>	SITE NAME: <u>Hillsboro / Eagle Zinc</u>
PHOTOGRAPH TAKEN BY: <u>Rich Johnson</u>	
COMMENTS: Pictures taken toward: <u>the southeast</u>	
<u>From south of a</u>	
<u>storage bldg.</u>	
ROLL #: <u>451</u> Neg. #: <u>3</u>	

DATE: <u>7/15/93</u>	
TIME: <u>10:15AM-5:09PM</u>	
PHOTOGRAPH TAKEN BY: <u>Rich Johnson</u>	
COMMENTS: Pictures taken toward: <u>the northeast</u>	
<u>From south of a</u>	
<u>storage bldg.</u>	
ROLL #: <u>451</u> Neg. #: <u>4</u>	

FOS



INSPECTION PHOTOS

DATE: <u>7/15/93</u>	SITE #: <u>1358070001</u> CO.: <u>Montgomery</u>
TIME: <u>10:15AM-5:09PM</u>	SITE NAME: <u>Hillsboro / Eagle Zinc</u>
PHOTOGRAPH TAKEN BY: <u>Rich Johnson</u>	
COMMENTS: Pictures taken toward: <u>the west from</u>	
<u>west of the old</u>	
<u>Carbon Recovery</u>	
<u>Bldg. - photo</u>	
<u>shows recirculating</u>	
<u>pond</u>	
ROLL #: <u>451</u> Neg. #: <u>5</u>	

DATE: <u>7/15/93</u>
TIME: <u>10:15AM-5:09PM</u>
PHOTOGRAPH TAKEN BY: <u>Rich Johnson</u>
COMMENTS: Pictures taken toward: <u>the west/northwest</u>
<u>From west of the old</u>
<u>Carbon Recovery</u>
<u>Bldg.</u>
ROLL #: <u>451</u> Neg. #: <u>6</u>





INSPECTION PHOTOS

DATE: <u>7/15/93</u>	SITE #: <u>1358070001</u> CO.: <u>Montgomery</u>
TIME: <u>10:15AM-5:09PM</u>	SITE NAME: <u>Hillsboro / Eagle Zinc</u>
PHOTOGRAPH TAKEN BY: <u>Rich Johnson</u>	
COMMENTS: Pictures taken toward: <u>the north/northwest</u>	
<u>from west of the</u>	
<u>Old Carbon Recovery</u>	
<u>Bldg.</u>	
ROLL #: <u>451</u> Neg. #: <u>7</u>	

DATE: <u>7/15/93</u>
TIME: <u>10:15AM-5:09PM</u>
PHOTOGRAPH TAKEN BY: <u>Rich Johnson</u>
COMMENTS: Pictures taken toward: <u>the north/northeast</u>
<u>from west of the</u>
<u>Old Carbon Recovery</u>
<u>Bldg.</u>
ROLL #: <u>451</u> Neg. #: <u>8</u>

FOS



INSPECTION PHOTOS

DATE: <u>7/15/93</u>	SITE #: <u>1358070001</u> CO.: <u>Montgomery</u>
TIME: <u>10:15AM-5:09PM</u>	SITE NAME: <u>Hillsboro / Eagle Zinc</u>
PHOTOGRAPH TAKEN BY: <u>Rich Johnson</u>	
COMMENTS: Pictures taken toward: <u>the north from</u>	
<u>northwest of the</u>	
<u>Old Carbon Recovery</u>	
<u>Bldg.</u>	
ROLL #: <u>9</u> Neg. #: <u>451</u>	

DATE: <u>7/15/93</u>
TIME: <u>10:15AM-5:09PM</u>
PHOTOGRAPH TAKEN BY: <u>Rich Johnson</u>
COMMENTS: Pictures taken toward: <u>the southeast</u>
<u>From northwest of</u>
<u>the Old Carbon Recovery</u>
<u>Bldg.</u>
ROLL #: <u>10</u> Neg. #: <u>451</u>



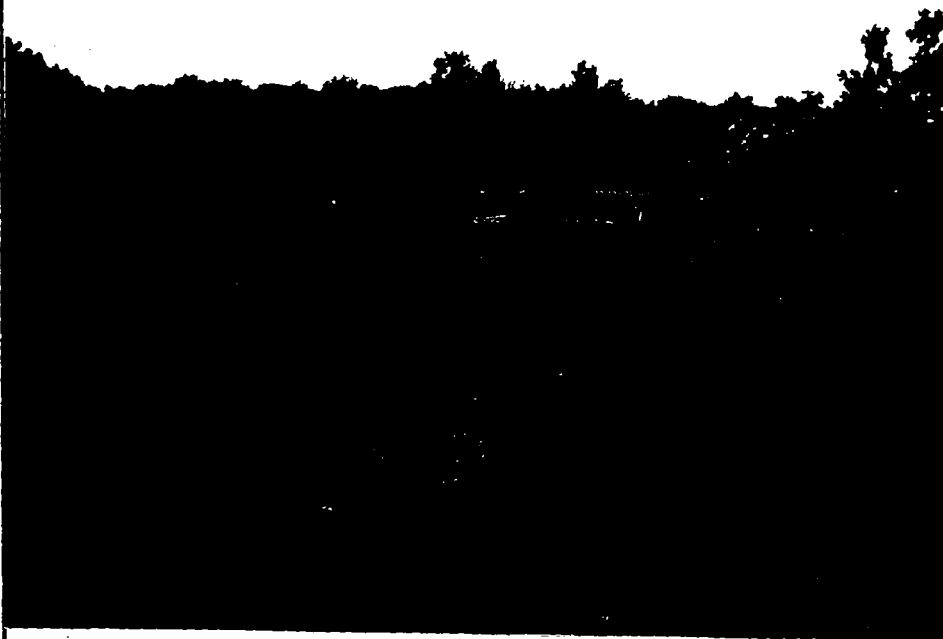
FOS



INSPECTION PHOTOS

DATE: <u>7/15/93</u>	SITE #: <u>1358070001</u> CO.: <u>Montgomery</u>
TIME: <u>10:15AM-5:09PM</u>	SITE NAME: <u>Hillsboro / Eagle Zinc</u>
PHOTOGRAPH TAKEN BY: <u>Rich Johnson</u>	
COMMENTS: Pictures taken toward: <u>the south/south-</u>	
<u>east from northwest</u>	
<u>of the Old Carbon</u>	
<u>Recovery Bldg.</u>	
ROLL #: <u>451</u> Neg. #: <u>11</u>	

DATE: <u>7/15/93</u>
TIME: <u>10:15AM-5:09PM</u>
PHOTOGRAPH TAKEN BY: <u>Rich Johnson</u>
COMMENTS: Pictures taken toward: <u>the southwest</u>
<u>from south end</u>
<u>of property.</u>
ROLL #: <u>451</u> Neg. #: <u>14</u>



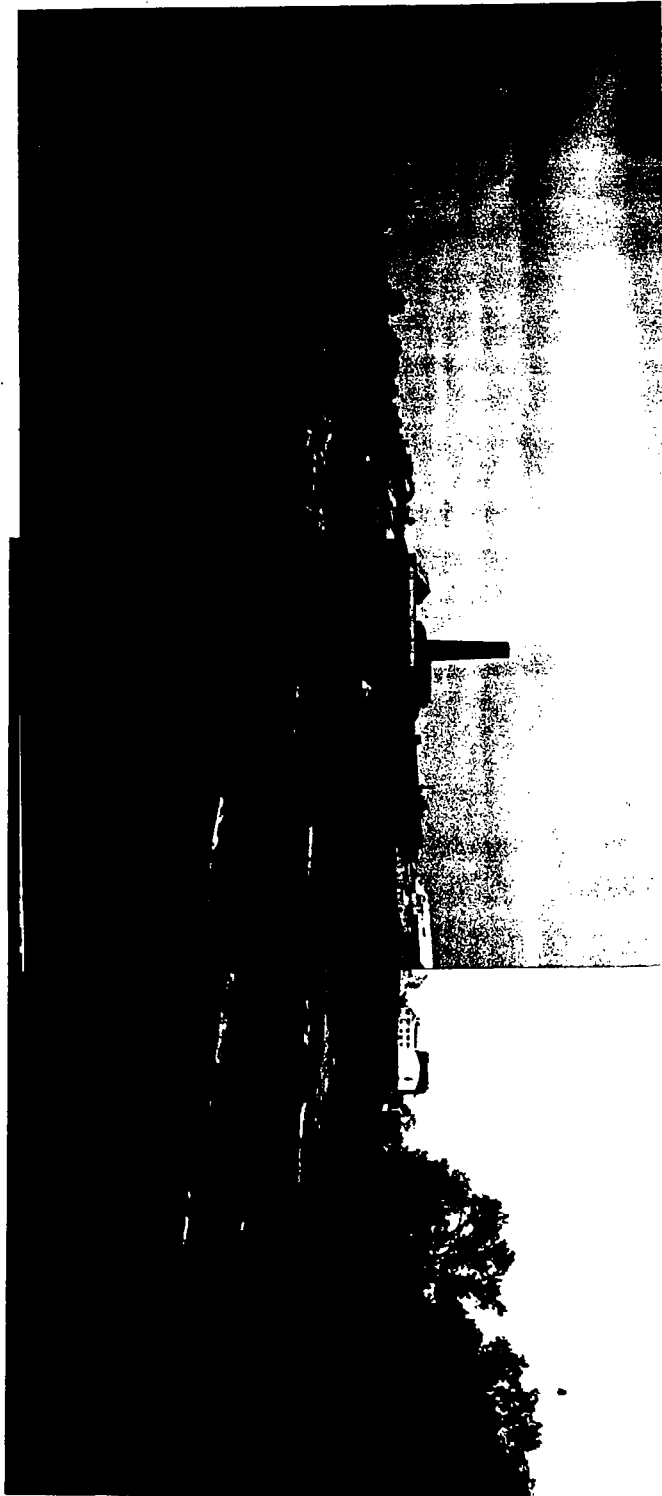
FOS



INSPECTION PHOTOS

DATE: <u>7/15/93</u>	SITE #: <u>1358070001</u> CO.: <u>Montgomery</u>
TIME: <u>10:15AM-5:09PM</u>	SITE NAME: <u>Hillsboro / Eagle Zinc</u>
PHOTOGRAPH TAKEN BY: <u>Rich Johnson</u>	
COMMENTS: Pictures taken toward: <u>the north/northeast</u> <u>From the south</u> <u>end of the property</u>	
ROLL #: <u>451</u> Neg. #: <u>12</u>	

DATE: <u>7/15/93</u>
TIME: <u>10:15AM-5:09PM</u>
PHOTOGRAPH TAKEN BY: <u>Rich Johnson</u>
COMMENTS: Pictures taken toward: <u>the northeast</u> <u>From the south</u> <u>end of the</u> <u>property</u>
ROLL #: <u>451</u> Neg. #: <u>13</u>



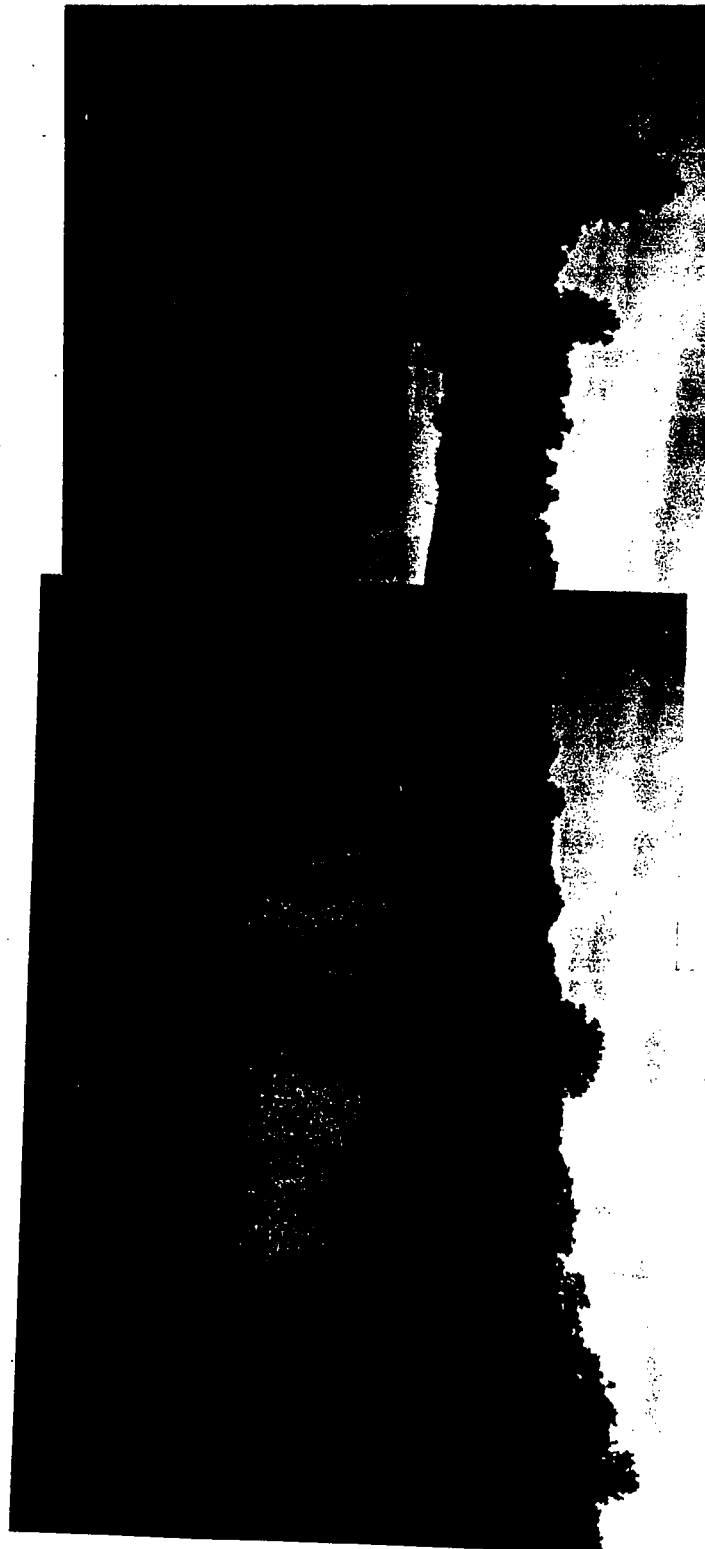
FOS



INSPECTION PHOTOS

DATE: <u>7/15/93</u>	SITE #: <u>1358070001</u> CO.: <u>Montgomery</u>
TIME: <u>10:15AM-5:09PM</u>	SITE NAME: <u>Hillsboro / Eagle Zinc</u>
PHOTOGRAPH TAKEN BY: <u>Rich Johnson</u>	
COMMENTS: Pictures taken toward: <u>the east from</u> <u>the southwest</u> <u>region of the</u> <u>property</u>	
ROLL #: <u>452</u> Neg. #: <u>15</u>	

DATE: <u>7/15/93</u>
TIME: <u>10:15AM-5:09PM</u>
PHOTOGRAPH TAKEN BY: <u>Rich Johnson</u>
COMMENTS: Pictures taken toward: <u>the southeast</u> <u>from the southwest</u> <u>region of the</u> <u>property</u>
ROLL #: <u>452</u> Neg. #: <u>16</u>



FOS



INSPECTION PHOTOS

DATE: <u>7/15/93</u>	SITE #: <u>1358070001</u> CO.: <u>Montgomery</u>
TIME: <u>10:15AM-5:09PM</u>	SITE NAME: <u>Hillsboro / Eagle Zinc</u>
PHOTOGRAPH TAKEN BY: <u>Rich Johnson</u>	
COMMENTS: Pictures taken toward: <u>the northwest</u> <u>from the southwest</u> <u>region of the</u> <u>property.</u>	
ROLL #: <u>452</u> Neg. #: <u>17</u>	


DATE: <u>7/15/93</u>
TIME: <u>10:15AM-5:09PM</u>
PHOTOGRAPH TAKEN BY: <u>Rich Johnson</u>
COMMENTS: Pictures taken toward: <u>the west from</u> <u>the southwest</u> <u>region of the</u> <u>property - photo</u> <u>of S301</u>
ROLL #: <u>452</u> Neg. #: <u>18</u>




FOS



INSPECTION PHOTOS

DATE: <u>7/15/93</u>	SITE #: <u>1358070001</u> CO.: <u>Montgomery</u>
TIME: <u>10:15AM-5:09PM</u>	SITE NAME: <u>Hillsboro / Eagle Zinc</u>
PHOTOGRAPH TAKEN BY: <u>Rich Johnson</u>	
COMMENTS: Pictures taken toward: <u>the north</u>	
<u>from the southern</u>	
<u>region of the</u>	
<u>property. - photo</u>	
<u>of S101.</u>	
ROLL #: <u>452</u> Neg. #: <u>19</u>	

DATE: <u>7/15/93</u>	
TIME: <u>10:15AM-5:09PM</u>	
PHOTOGRAPH TAKEN BY: <u>Rich Johnson</u>	
COMMENTS: Pictures taken toward: <u>the southeast</u>	
<u>from the east</u>	
<u>side of the</u>	
<u>property. - photo</u>	
<u>of S302</u>	
ROLL #: <u>452</u> Neg. #: <u>20</u>	

FOS



State of Illinois

ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

217/524-3300

June 8, 1994

Mr. Ted Diamond
T. L. Diamond & Company, Inc.
30 Rockefeller Plaza
New York, New York 11012-0195

Re: 1358070001 -- Montgomery County
Eagle Zinc Company
Permit File

Dear Mr. Diamond:

Thank you for your letter of May 17, 1994 regarding a proposed revised definition of solid waste. The report, Reengineering RCRA for Recycling, was drafted by members of the Definition of Solid Waste Roundtable. The Agency was not a member of this group and has not been given an opportunity to comment on this document. Their recommendations have not been submitted to senior USEPA management, so we view this document as very preliminary. However, we do feel that we will be given an opportunity to comment on any proposed regulatory changes resulting from the document and will comment at that time.

The Agency is very concerned about encouraging proper recycling. We are also actively helping facilities with pollution prevention projects and waste minimization. Our comments will be submitted at the appropriate time and will consider issues such as those identified in your letter.

If you have any further questions, please contact Ted Dragovich, P.E. at 217/524-3306. Again, thank you for your interest in this matter.

Sincerely,

Mary A. Gade
Director

bcc: File
Central Region
Doug Clay
T. Dragovich

T. L. DIAMOND & COMPANY, INC.

30 ROCKEFELLER PLAZA
NEW YORK, NEW YORK 10112-0195

*Your Child
response*
1358070001

(212) 582-0420
Fax: (212) 582-3412

May 17, 1994

Ms. Mary Gade, Director
Environmental Protection Agency
2200 Churchill Road
Springfield, IL 62708

RECEIVED IN THE
OFFICE OF THE DIRECTOR

MAY 24 1994

Dear Ms. Gade:

As a company involved in metal recycling, I would like to express my concerns about EPA'S proposed report on the definition of solid waste. "Re-engineering RCRA for Recycling" would represent a tremendous step backward in our efforts to better utilize our resources.

In its present form, the proposed report would not encourage recycling and would further complicate the current regulations without adding to environmental protection. As an active metals recycler, this proposal represents a tremendous step backward and would have extremely negative impact on our business.

Specifically, the report has at least five problem areas which should be addressed:

1. The proposal does nothing to refine the definition of solid waste and establish clear distinctions between what is manufacturing and what is waste management.
2. The proposal would create massive barriers to innovation and technology development.
3. The proposal muddles the closed loop exemption that everyone has been working under.
4. The proposal is less clear than what exists now. All aspects of it will create massive new burdens for the states.
5. The proposal will discourage waste minimization through recycling because the rigid categories will discourage industry from recycling on a broad basis.

After reviewing the EPA proposal, I hope you will communicate your concerns to the agency as soon as possible.

If you have any questions or would like to find out more about metals recovery, please do not hesitate to contact me.

Very truly yours,

